

(9)

3D FIGURES:-

(1)

1. The diameter of Road Roller is 84 cm and its length is 150 cm. It takes 600 revolutions to level once on a particular road. Then What is the area of that road in m^2 ?

- (a) 2376 (b) 2476 (c) 2496 (d) 2516

2. A smaller triangle is having three sides. Another big triangle is having sides exactly double the sides of the smaller triangle. Then What is the ratio of Area of the smaller triangle to Area of the Bigger triangle?

- (a) 1:2 (b) 2:1 (c) 1:4 (d) 4:1

3. The ratio of radii of two cylinder A and B are in the ratio of 2:1 and their heights are in the ratio of 2:1 respectively. The ratio of their total surface areas of cylinder A to B is?

- (a) 2:1 (b) 1:2 (c) 1:4 (d) 4:1

4. The length of a wall is $\frac{5}{4}$ times of its height. If the area of wall be $500 m^2$; then what is the sum of length and height of the wall?

- (a) 55m (b) 45m (c) 40m (d) 50m

5. Find the area of the white sheet required to prepare a cone with a height of 21 cm and the radius of 20 cm.

- (a) 3080 cm^2 (b) 2300 cm^2 (c) 3460 cm^2 (d) 3600 cm^2

6. The length of a rectangle wall is $\frac{3}{2}$ times of its height. If the area of the wall is $600 m^2$. What is the sum of the length and height of the wall?

- (a) 40 (b) 60 (c) 50 (d) 70

(1) :- 3D FIGURES :- <2>

7. A cylindrical Cistern whose diameter is 14 cm is partly filled with water. If a rectangular block of iron 22 cm in length; 14 cm in breadth and 7 cm in thickness is wholly immersed in water; by how many centimeters will the water level rise?

- (a) 10 cm (b) 14 cm (c) 12 cm (d) 15 cm

8. If the radius of the cone is doubled; keeping the height constant; what is the ratio of the volume of the smaller cone to larger cone?

- (a) 2:9 (b) 5:7 (c) 1:4 (d) 1:7

9. What is the volume of a right cone whose cross section is isosceles triangle with a base 10 cm and slant height 13 cm?

- (a) 312.4 sq.cm (b) 314.2 sq.cm (c) 229.2 sq.cm (d) 35.4 sq.cm

10. In a swimming pool measuring 80 cm x 30 cm; 120 men take a dip. If the average displacement of water by a man is 5 cm^3 ; what will be the rise in water level?

- (a) 230.6 cm (b) 223.5 cm (c) 233.8 cm (d) 238.3 cm

11. A cylindrical tube of radius 10 cm contains water up to depth of 25 cm. A spherical iron ball is dropped into the tube and thus level of water is raised by 5 cm. What is the ~~diameter~~ of the iron ball (approximate).

- (a) 19 (b) 15 (c) 14 (d) 17

(Q) :- 3D FIGURES :- <3>

12. A tank is 25m long; 12m wide and 6m deep. The cost of plastering its walls and bottom at 25 paise per sq.m is :-

- (a) 212 (b) 195 (c) 186 (d) 171

13. Height of the cylindrical jar is decreased by 36%. By what percent must the radius be increased; so that there is no change in its Volume?

- (a) 25% (b) 35% (c) 45% (d) 50%

14. The respective ratio of Curved Surface area and Total Surface area of a cylinder is 4:5. If the Curved Surface area of the cylinder is 1232 cm^2 ; What is the height?

- (a) 14 cm (b) 28 cm (c) 7 cm (d) 24 cm

15. A cone whose height is ^{one-fourth} of its radius is melted to form a hemi-sphere. Find the ratio of the radius of the hemi-sphere to that of the cone.

- (a) 1:3 (b) 1:1 (c) 1:4 (d) 1:2

16. Find the number of spherical balls of radius 1 cm that can be made from a cylinder of height 8 cm and diameter 14 cm?

- (a) 284 (b) 294 (c) 304 (d) 314

17. If the Volume of Wire remains the same but its radius decreases to $\frac{1}{3}$ rd of previous; then the new length of the wire will how many times of the previous length.

- (a) 3 times (b) 4 times (c) 6 times (d) 9 times.

(Q) :- 3D FIGURES :- <4>

18. The total cost of painting the walls of a room is ₹ 475. Find the cost of painting the walls of another room whose length, breadth and height each are double than the dimensions of the previous room.
 (a) ₹ 1780 (b) ₹ 1900 (c) ₹ 1846 (d) ₹ 1960

19. A solid sphere of radius 20 cm is melted to form 12 spherical balls. Find the radius of each of the ball?
 (a) 12 cm (b) 8 cm (c) 20 cm (d) 10 cm

20. What will be the percentage increase in the surface area of the cube whose side is increased by 50%.
 (a) 75% (b) 125% (c) 150% (d) 100%

21. What is the volume of right circular cone whose radius of base is 70 cm and curved surface area is 40040 cm^2 ?
 (a) 839500 cm^3 (b) 713400 cm^3 (c) 862400 cm^3 (d) 4623200 cm^3

22. Find the radius of each of the 8 spherical balls which are made from a solid sphere of radius 10 cm by melting it.
 (a) 12 cm (b) 8 cm (c) 20 cm (d) 5 cm

23. A cylinder and a cone have equal base and equal height. The ratio of the radius of base to height is 5:12. Find the ratio of the total surface area of the cylinder to that of the cone.
 (a) 7:15 (b) 16:9 (c) 17:9 (d) 15:7

24. How many spherical balls whose radius is half that of cylinder can be formed by melting a cylindrical iron rod whose height is eight times its radius?
 (a) 44 (b) 48 (c) 60 (d) 56

25. If the side of a cube whose diagonal measures $36\sqrt{3}\text{ cm}$ is ?
 (a) 56356 cm^3 (b) 34625 cm^3 (c) 46656 cm^3 (d) 25376 cm^3